

**STATE OF NEW MEXICO
BEFORE THE ENVIRONMENTAL IMPROVEMENT BOARD**

**IN THE MATTER OF PROPOSED REVISIONS
TO THE STATE IMPLEMENTATION PLAN
TO SATISFY THE REQUIREMENTS OF
CLEAN AIR ACT 110(a)(2)(D)(i)(II)
WITH RESPECT TO VISIBILITY**

No. EIB 11-02 (R)

NMED EXHIBIT 4 – TESTIMONY OF MARY UHL

1 Clean Air Act (CAA) §110(a)(2)(D)(i) requires that each state implementation plan (SIP)
2 submitted to EPA must address emissions from within the state that affect other states through
3 interstate transport. Section 110(a)(2)(D)(i) contains four elements related to the impacts of
4 interstate transport. As explained by EPA, the “SIP must prevent sources in the state from
5 emitting pollutants in amounts which will: (1) Contribute significantly to nonattainment of the
6 NAAQS in other states; (2) interfere with maintenance of the NAAQS in other states; (3)
7 interfere with provisions to prevent significant deterioration of air quality in other states; or (4)
8 interfere with efforts to protect visibility in other states.” 75 Fed. Reg. 72688, 72689-90, Nov.
9 26, 2010.

10 On September 17, 2007, New Mexico submitted a SIP to EPA addressing each of the
11 four elements. EPA approved this SIP with respect to element (1) on June 11, 2010 (75 Fed.
12 Reg. 33174), and approved it with respect to elements (2) and (3) on November 26, 2010 (75
13 Fed. Reg. 72688). With respect to the fourth and final element, regarding visibility, the
14 September 17, 2007 SIP stated that New Mexico would submit an approvable SIP under for
15 regional haze by December, 2007. This commitment was in accordance with EPA guidance
16 applicable at the time, which provided that “a state could meet the visibility prong of the

1 transport requirements of section 110(a)(2)(D)(i)(II) of the CAA by submission of the RH SIP,
2 due in December 2007.” 76 Fed. Reg. 491, 496 (Jan. 5, 2011).

3 New Mexico failed to submit an approvable Regional Haze SIP by December, 2007, and
4 on January 15, 2009, EPA published a “Finding of Failure to Submit State Implementation Plans
5 Required by the 1999 regional haze rule.” 74 Fed. Reg. 2392 (Jan. 15, 2009).

6 In accordance with a Consent Decree with WildEarth Guardians setting a schedule for
7 EPA action on CAA 110(a)(2)(D) SIPs, on December 20, 2010, EPA proposed disapproval of
8 New Mexico’s September 17, 2007 110(a)(2)(D) SIP with respect to the visibility prong, and
9 proposed a FIP consisting of a determination of Best Available Retrofit Technology (BART) for
10 the San Juan Generating Station (SJGS). EPA’s rationale for this FIP was that installation of
11 BART controls at the SJGS was necessary to ensure that New Mexico achieved the emission
12 reductions relied upon by neighboring states in setting their reasonable progress goals for
13 visibility improvement.

14 On February 28, 2011 the New Mexico Environment Department filed a petition for
15 adoption of a Regional Haze SIP. That SIP contains a proposed BART determination for the
16 SJGS. Although NMED’s proposed BART determination differs from that proposed by EPA, as
17 explained below it achieves the reductions relied upon by other states in setting their visibility
18 goal.

19 **Emissions Reductions Necessary to Satisfy § 110(A)(2)(D)**

20 In the proposed FIP, EPA explains that as a product of interstate collaboration in developing
21 SIPs through the West Regional Air Partnership, “the common understanding was that each
22 State would take action to achieve the emission reductions relied upon in their reasonable
23 progress demonstrations under the [Regional Haze Rule]”. 76 Fed. Red. At 496. Therefore,

1 EPA found that “an implementation plan that provides for emission reductions consistent with
2 the assumptions used in the WRAP [photochemical grid] modeling will ensure that emissions
3 from New Mexico do not interfere with measures designed to protect visibility in other states.”
4 *Id.*

5 Therefore, EPA used the emission rates assumed in the WRAP’s modeling for NO_x and
6 SO₂ from the SJGS as the criteria for avoiding interference with other states visibility measures.
7 Finding that the existing federally enforceable emission limits were higher than those rates, the
8 EPA determined that further reductions were required.

9 Specifically, EPA noted that the WRAP modeling assumed NO_x emission rates of 0.27
10 lbs./mmBtu for SJGS units 1 & 2, and 0.28 lbs./mmBtu for units 3 & 4. For SO₂ from SJGS, the
11 modeling assumed an emission rate of 0.15 lbs/mmBtu for all four units. *Id.* at 497. EPA
12 compared these WRAP modeling assumptions to the federally enforceable limits applicable to
13 SJGS through a consent decree entered into by the operator of SJGS, Public Service Company of
14 New Mexico (PNM), NMED, and environmental groups, which are: 0.30 lbs/mmBtu for NO_x
15 and 0.15 lbs/mmBtu for SO₂. *Id.* Noting the discrepancy between the federally enforceable
16 limits and the WRAP assumptions, EPA concluded that “it is appropriate to establish federally
17 enforceable limits for pollutants that impact visibility projections within the WRAP
18 photochemical modeling.” *Id.* EPA then went on to cite its authority to issue a regional haze
19 FIP for New Mexico, including BART for the SJGS, as a mechanism to achieve the needed
20 reductions. *Id.* For all other sources in New Mexico, EPA proposed finding that they are
21 sufficiently controlled to prevent interference with visibility programs of other states. *Id.*

1 In summary, EPA adopted the WRAP assumptions for SJGS of 0.27 – 0.28 lbs/mmBtu
2 for NOx and 0.15 lbs/mmBtu for SO2 as the criteria for approvability of a § 110(a)(2)(D)
3 implementation plan.

4 **Satisfaction of the § 110(a)(2)(D) Requirements**

5 **NOx**

6 On February 28, 2011, the Department proposed a complete regional haze SIP, including a
7 BART determination for NOx for the SJGS. The BART determination calls for installation of
8 Selective Non-Catalytic Reduction (SNCR) on all four SJGS units, and an emission rate of 0.23
9 lbs/mmBtu. This emission rate is well under the 0.27 – 0.28 lbs/mmBtu rate relied upon by other
10 states in setting their reasonable progress goals. Therefore, if the board adopts this BART
11 determination, New Mexico will also have satisfied the visibility requirements of CAA §
12 110(a)(2)(D)(i)(II) with respect to NOx.

13 **SO2**

14 The proposed FIP noted that SJGS appears to meeting the 0.15 lbs/mmBtu emission rate
15 assumed by the WRAP even though there was no enforceable requirement that it do so. EPA
16 proposed to impose that rate as a federally enforceable limit in the FIP. EPA also noted that it
17 was not proposing to find that the limit satisfies the BART requirement for SO2, as that
18 requirement would be satisfied by New Mexico's participation in the SO2 backstop trading
19 program. 76 Fed. Reg. at 498.

20 Consistent with EPA's statement, the regional haze SIP submitted to the Board on
21 February 28, 2011 addressed the BART requirement for SO2 through participation in the SO2
22 backstop trading program. In order to address the separate requirement to satisfy § 110(a)(2)(D)
23 for SO2, SJGS has submitted a permit modification to limit emissions of SO2 to 0.15

1 lbs/mmBtu. The application is included as Exhibit 3 in this Notice of Intent. Upon the
2 Department's approval of that permit modification and the Board's approval of this SIP, New
3 Mexico will have satisfied the visibility requirements of CAA § 110(a)(2)(D)(i)(II) with respect
4 to SO₂.